

CLAIMS

1 A method for the diagnosis of a polymorphism in MCT-1 in a human, which method comprises determining the sequence of the nucleic acid of the human at at least one
5 polymorphic position selected from one or more of the following positions:
positions 1450 and 2461 in the polynucleotide sequence of the MCT-1 gene as defined by the position in SEQ ID NO: 13.

2 A method according to claim one in which the polymorphisms are further defined as follows:

10 at position 1450 is presence of A and/or G; and
at position 2461 is the presence of A and/or G.

3 A method for diagnosis according to claim 1 or 2 in which the sequence is determined by a method selected from amplification refractory mutation system and restriction fragment length polymorphism.

15 4 A polynucleotide comprising at least 20 bases of the human MCT-1 gene and comprising an allelic variant selected from any one of the following:

variant	Position in SEQ ID NO 13
G	1450
G	2461

5 An allele specific primer capable of detecting a MCT-1 gene polymorphism at one or more of the positions as defined in claim 1.

20 6 An allele-specific oligonucleotide probe capable of detecting a MCT-1 gene polymorphism at one or more of the positions defined in claim 1.

7 A diagnostic kit comprising an allele specific oligonucleotide probe as defined in claim 6 and/or an allele-specific primer as defined in claim 5.

8 Use of a polymorphism as defined in claim 1 as a genetic marker in linkage studies.

25 9 A computer readable medium comprising at least one variant sequence as defined in claim 4 stored on the medium.

10 A method of treating a human in need of treatment with a drug transportable by MCT-1 in which the method comprises:

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- i) diagnosis of a polymorphism in MCT-1 in the human, which diagnosis comprises determining the sequence of the human at one or more of the following positions: positions 1450, 1482 and 2461 in the sequence of the MCT-1 polynucleotide as defined by the position in SEQ ID NO: 13; and
- 5 at position 490 of human MCT-1 polypeptide as defined by the position in SEQ ID NO 14; and
- ii) administering an effective amount of the drug.
- 11 A method according to claim 10 in which the drug is a statin.
- 12 A method according to claim 10 in which the drug is rosuvastatin.

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